Class 10 Maths Chapter 4 Quadratic Equations MCQs For Practice

**1. The degree of a quadratic equation is**
(a) 1
(b) 2
(c) 3
(d) 4

**2. Which of the following is a quadratic equation?**
(a) $x^2 + 2x + 1 = (4 - x)^2 + 3$
(b) $-2x^2 = (5 - x)(2x-(2/5))$
(c) $(k + 1) x^2 + (3/2) x = 7$, where $k = -1$
(d) $x^3 - x^2 = (x - 1)^3$

**3. If 1/2 is a root of the equation $x^2 + kx - 5/4 = 0$, then the value of k is**
(a) 2
(b) -2
(c) 1/4
(d) 1/2

**4. The discriminant of the quadratic equation $ax^2 + bx + c = 0$ is**
(a) $D = b^2 - 4bc$
(b) $D = a^2 - bc$
(c) $D = b^2 - 4ac$
(d) $D = c^2 - 4ab$

**5. The constant should be added and subtracted to solve the quadratic equation $4x^2 - \sqrt{3}x - 5 = 0$ by the method of completing the square is**
(a) 9/16
(b) 3/16
(c) 3/4
(d) $\sqrt{3}/4$

**6. Which of the following is not a quadratic equation?**
(a) $(x - 2)^2 + 1 = 2x - 3$
(b) $x(x + 1) + 8 = (x + 2) (x - 2)$
(c) $x (2x + 3) = x^2 + 1$
(d) $(x + 2)^3 = x^3 - 4$

**7. The roots of the quadratic equation $x^2 - 55x + 750 = 0$ are**
(a) 30 and 25
(b) -30 and -25
(c) 70 and 15
(d) 25 and -30

**8. Values of k for which the quadratic equation $2x^2 - kx + k = 0$ has equal roots is**
(a) 0 only
(b) 4

(c) 8 only

(d) 0, 8

**9. $(x^2 + 1)^2 - x^2 = 0$ has**

(a) four real roots

(b) two real roots

(c) no real roots

(d) one real root

**10. Which constant must be added and subtracted to solve the quadratic equation $9x^2 + (3/4)x - \sqrt{2} = 0$ by the method of completing the square?**

(a) 1/8

(b) 1/64

(c) 1/4

(d) 9/64

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|---|---|---|---|---|
| 1 - (b) | 2 – (d) | 3 - (a) | 4 - (c) | 5 - (b) |
| 6 - (b) | 7 - (a) | 8 - (d) | 9 - (c) | 10 - (b) |